

# **COLUMBIA RIVER REGIONAL FORUM**

## **TECHNICAL MANAGEMENT TEAM**

August 7, 2002

### **FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS**

Facilitator: Donna Silverberg

The following notes are a summary of issues that are intended to point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members.

#### **Bonneville Spillway Test:**

Update on plans for the spillway deflector tests at Bonneville was deferred to the next TMT meeting.

#### **Emergency Action List:**

Scott Bettin reported that the current list should be used through the end of August, with minor changes. They include changing the time period from 2 hours to 24 hours, and deleting item 4 in the list of actions to be taken.

Ron Boyce requested that a meeting be set up with those interested when BPA could go over list in detail.

**ACTION:** Ron will contact Scott with potential dates and times available for a meeting to review the Emergency Action List. August 13 was mentioned as a potential date.

#### **Hungry Horse Operations Update:**

Tony Norris reported that Hungry Horse is releasing 6 kcfs now, and will ramp down to 4 kcfs by August 26. Elevation 3545.5 is expected at the end of August, with flows being provided through September 21. Ron Boyce expressed Oregon's concern about current flows in the lower Columbia, but did not object to the operation.

#### **Libby Operations:**

BPA reported on status of negotiations for a swap with Canada. This year, very little is available from Arrow, so they are pursuing a swap with 90% of the water coming from Duncan. This should allow 4-5 kcfs reduction from Libby through the end of this month. There is a verbal agreement at this point, and the swap could start as early August 8. This is a 1-1 swap and water will need to come back out of Libby by the end of the year.

#### **Operational Request SOR #2002-MT-1**

Jim Litchfield presented Montana's request that flows out of Libby be reduced to 11 kcfs and maintained as close as possible to this flow until the end of September. Justifications for the request are noted on the SOR and include resident fish and local needs balanced against the needs of lower river salmon. A discussion followed about the impact of the Libby/Duncan swap on this SOR (and visa versa). If flows are reduced to less than 15-16 kcfs, then the opportunity to make the swap with Canada no longer exists. The swap allows some reduction to occur, but not to the level of the SOR.

NMFS reported that its internal discussions had led them to support reducing flows only enough to allow the Libby/Duncan swap. Other Salmon Managers supported the reduction in flows from Libby because of the water from Duncan, but did not agree with reducing the flows out of Libby further than that.

**Action:** Flows from Libby will be reduced to 16 kcfs as soon as possible, depending on the timing of the Libby/Duncan swap.

### **Dworshak Operations:**

- **Temperature Issues:**

COE reported that DWR was at elevation 1570.45 releasing 13.7 kcfs. FPAC requested that DWR be operated to increase temperatures from the current 45 degrees to 48 degrees to help the downstream USFWS hatchery. COE said operations would start August 8, 2002 to reach this temperature. It was agreed that the Corps will coordinate with the hatchery to dictate a temperature range. There was a discussion about whether this temperature could be maintained through the end of September.

**Action:** DWR will be operated to target an increase in water temperature to 48 degrees.

**Action:** Cathy Hlebechuk will email TMT members more information on the water mixing capabilities at DWR to help them understand how long this temperature can be maintained. She will also post a revised DWR HYSSR chart on the website with current data.

- **Planned Outage:**

COE reported that the planned outage for work at DWR has been rescheduled to start September 16 and will run through the end of October.

- **September Releases:**

FPAC, COE and Univ. of Idaho representatives have been meeting to discuss study plans involving DWR. They will be developing an SOR related to the Idaho Nez Perce request to release an additional 200 kaf from DWR this year.

**Action:** TMT will meet on Thursday August 15 to discuss the SOR in the usual room at the COE, 9-12 pm. The call in number will be 503-808-5191.

### **Current System Conditions:**

**Fish migration status:** Paul Wagner reported on status and answered questions.

**Action:** Include 10-year average data for subyearling Chinook to the information at the “Lessons Learned” session at the end of the year.

**Water Quality:** Laura Hamilton provided daily average spill levels in addition to TDG in a new format in response to TMT members request.

### **Other:**

**Lower Monument** 500kV line work. Scott Bettin reported that this would take place August 24, 25 and 26 from 6AM to 6PM each day. He also asked that ‘when to end MOP’ should be on the next TMT agenda, and proposed that TMT members think about August 24 as a possible date to end MOP.

Little Goose Doble Testing. Rudd Turner reported that this testing would take place for 4 days from August 19-22 from 5:30AM to 5:00PM each day. Unit 5 will still be running.

FPAC SOR to be submitted: As noted above, FPAC requested that a TMT meeting be held next week to consider the SOR they will be filing about DWR operations in September.

Action: TMT agreed to meet in person from 9:00AM to noon on Thursday, August 15. There will be a different call-in number, which is #5191.

**Next Meeting, August 15:**

**Agenda items:**

- SOR re: DWR releases filed by FPAC
- End of MOP
- Bonneville Spillway Test

**August 21 Meeting:**

- Draft Water Management Plan
- Emergency Action List update
- Libby/Duncan Swap status
- CRITFC on Fall Treaty Fishing
- Pictures of construction at Lower Monument

**TECHNICAL MANAGEMENT TEAM  
MEETING NOTES**

**August 7, 2002**

**CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE  
PORTLAND, OREGON**

**TMT Internet Homepage: <http://www.nwd-wc.usace.army.mil/TMT/index.html>**

**DRAFT**

***1. Greeting and Introductions***

The August 7 Technical Management Team meeting was chaired by Cathy Hlebechuk of the Corps and facilitated by Donna Silverberg. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Hlebechuk at 503/808-3942.

***2. Weather Update.***

Dan Matusiewicz of the RFC said freezing levels this morning were in the 8,000-13,000-foot range. He said low pressure is lingering across the Northwest, bringing some minor precipitation. Over the next couple of days, that trough of low pressure will move gradually to

the east, replaced by a ridge of high pressure bringing dry weather and warmer temperatures through Friday, August 9. Another low pressure system will then follow that high pressure ridge inland, and could produce some weak moisture events. Next week, another ridge of high pressure will move in from the Pacific, with below-normal precipitation everywhere except perhaps Northern Idaho and Eastern Montana.

Over the longer term, said Matusiewicz, El Niño conditions are expected to persist into early 2003, although the effects are expected to be weaker than the 1997-'98 El Niño. From September 2002-May 2003, he said, we're forecasting a 43%-53% chance of slightly above-normal temperatures, and a 43%-53% chance of slightly below-normal precipitation. Beyond that, there are equal chances of above-, below- and normal temperatures and precipitation, Matusiewicz said. Kyle Martin said the latest CRITFC forecast calls for normal temperatures and below-normal precipitation over the next 30 days.

### ***3. Bonneville Spillway Test.***

Discussion of this item was deferred until next meeting.

### ***4. Emergency Action List Update.***

Scott Bettin said there have been no changes made to the list since the last TMT meeting, with the exception of the fact that some of the two-hour actions could take up to 24 hours to implement. At Chris Ross' request, Bettin said he will provide a detailed briefing about the reasons why certain actions will take longer to implement at NMFS' Portland offices next Tuesday, August 13.

### ***5. Hungry Horse Operations Update.***

Tony Norris said USBR is now projecting 3545.5 feet as the August 31 ending elevation at Hungry Horse, the equivalent of 121 kaf above elevation 3540. At a discharge rate of 4 Kcfs, that water is expected to last until September 27. Hungry Horse is currently releasing 6 Kcfs, but is scheduled to ramp down to 4 Kcfs on August 26.

### ***6. Libby Operations Update.***

Hlebechuk reported the current elevation at Libby as 2452.5 feet, with 21 Kcfs outflow. BPA's Rick Pendergrass said BPA has been discussing the possibility of a 2002 Libby/Arrow swap with Canada; however, there isn't much water available at Arrow for the swap. Duncan is also a possibility, he said, but Duncan is a much smaller reservoir than Libby. However, it now appears that we will be able to work out a Libby-Duncan swap equivalent to about 5 feet in Libby elevation this year. He added that Duncan can release up to 10 Kcfs in non-power discharge. That will be a one-for-one flow swap? Jim Litchfield asked. That's correct, Pendergrass replied, adding that the swap is expected to begin tomorrow. That's good news, Silverberg said. [Editors comment: On Wednesday morning, August 7 there was tentative verbal agreement with Canada to swap 108.7 ksf of storage \(draft Libby to 2444' at end of August rather than the normal 2439'\). This was what reported at the TMT meeting. However, on Thursday morning the BC](#)

Hydro people that had negotiated the 108.7 ksfd swap talked further with field staff who expressed concerns about high Duncan discharge (flooding problems) and lower Duncan levels for recreation. So, the final agreement was for a swap for 70 kcfd (draft Libby to 2442.2' at end of August). Flows were reduced from 21,000 to 18000 cfs at Libby on Thursday, August 8 at 1315 MDT. The agreement is being written up and will be signed by BCH, BPA and the Corps.

There is also a mandatory planned outage coming up at Libby, said Bettin, but it will take place in the first two weeks in September, and shouldn't interfere with any planned operations – it will restrict generation to 10 Kcfs during that two-week period. We'll probably only be running about 8 Kcfs out from the project during that time, he added.

### ***7. New System Operational Requests.***

Earlier this week, the action agencies received SOR 2002-MT-1. This SOR, supported by the State of Montana, requests the following specific operations:

- As soon as practical, reduce flows out of Libby to 11 Kcfs and maintain as close as possible to this flow until the end of September. Maintaining a flow of 11 Kcfs from Libby is estimated to require drafting Koocanusa to elevation 2449 at the end of September based on current inflow forecasts. Since the projected outflow is based on forecasts of inflows to Lake Koocanusa the actual flows should be gradually adjusted to achieve the desired ending elevation at the end of September. Any flow changes should be effected by following the flow ramp rates in the Biological Opinion for bull trout.

Jim Litchfield spent a few minutes going through the specifics of and justification for this SOR, the full text of which is available via the TMT's Internet homepage. He noted that the overall intent of this SOR is to balance the needs of Montana residents and resident fish with those of anadromous fish downstream. The group devoted a few minutes of discussion to the current SSARR run, which does not take into account the just-negotiated Libby-Duncan swap. Hlebechuk noted that B.C. Hydro has told the Corps that they are trapping 35% of the water released from Libby this summer, as per their rights under International Joint Commission rules

Paul Wagner said Libby operations were discussed at yesterday's FPAC meeting, and have been discussed internally at NMFS. The bottom line is that we will not meet the BiOp summer flow target at McNary, he said, and while we appreciate and sympathize with the feelings of the citizens of Montana on this issue, the planned Libby-Duncan swap is as far as we're willing to go, in terms of reducing the 20-foot Libby draft this summer and reducing planned outflow from the project. What the swap will accomplish is a reduction in Libby outflow from the current 21 Kcfs to 15 Kcfs-16 Kcfs, Wagner added.

With respect to Libby operations after August 31, Bettin reiterated that the action agencies plan to release a flat 8 Kcfs during the first two weeks of September.

## ***8. Dworshak Operations.***

Hlebechuk said Dworshak continues to release 13.7 Kcfs; 1570.45 was the project elevation as of midnight last night. We're releasing 45-degree F water, although we may be getting a request for warmer water from the hatchery soon, she added. We discussed Dworshak operations at yesterday's FPAC meeting, and reached agreement that we could go up to 48 degrees on Dworshak discharge, at least for the time being, David Wills said. We believe we can implement that compromise and still stay within acceptable temperature criteria at Lower Granite, he said. So the salmon managers are requesting that we raise the Dworshak discharge temperature to at least 48 degrees? Hlebechuk asked, That's correct, starting today, Wills replied – we'll continue to monitor water temperatures at Lower Granite to make sure we're within an acceptable temperature range.

Dick Cassidy reported that, according to his analysis, there should be enough cold water left in Dworshak to provide three more weeks of 45-degree water, followed by 48-degree release water at least through the first two weeks in September. The group devoted a few minutes of discussion to the nuances of the temperature mixing capabilities at Dworshak; Cassidy said that, basically, once Dworshak's elevation nears 1520 feet, the Corps loses much of its ability to control outflow temperature at that project. Hlebechuk said she will provide a brief written explanation of the temperature mixing capabilities at Dworshak for TMT perusal.

Hlebechuk noted that there is a scheduled transformer outage at Dworshak, which will run from September 16 through the end of October. Only one unit will be available at Dworshak once that outage takes effect. The capacity of that unit is about 2.5 kcfs and an additional 0.5 – 1 kcfs could be spilled to stay within the 110% tgd state standard, Hlebechuk added. The question we've got is, does that schedule fit in with the operation the TMT wants to see in September? Rudd Turner asked.

We discussed this issue at yesterday's FPAC meeting, Ron Boyce replied; the bottom line is that we plan to develop an SOR covering August-September operations later this week, and are requesting a special TMT meeting next Thursday, August 15 at 9 am, to discuss FCRPS operations through mid-September. Hlebechuk noted that there will be a different call-in number for that meeting, 503/808-5191. Mainly, we need to decide how much of the volume above elevation 1520 feet at Dworshak will be released in August, and how much will be released in September, Turner said, and whether TMT is willing to draft below 1520 feet to conduct the temperature study.

Hlebechuk noted that, according to the most recent SSARR, Dworshak's August 31 elevation will be 1530.4 feet, 138 kaf above 1520, if the project continues to release 13.8 Kcfs through the end of the month. It would draft to near elevation 1515 if we were to draft 200 kaf of storage in September, she added.

## ***9. Current System Conditions.***

Wagner began with a report on the status of the juvenile migration; he said Billy Connor's current assessment is that 89% of the PIT-tagged wild Snake River subyearling chinook have now passed Lower Granite. He added, however, that most of the fish in the early part of the subyearling run are of hatchery origin, and many of the most valuable wild fish have not yet arrived at Lower Granite. He added that the survival of the wild PIT-tagged subyearlings has been higher than normal this year.

Moving on, Wagner said fall chinook subyearling passage indices at Lower Granite have fallen to about 1,500 fish per day, about one-tenth the index numbers seen two weeks ago. A similar trend is in effect at McNary, he said, adding that, while the decline in index numbers has been more precipitous than what has been seen in recent years, it is not unexpected at this point in the season. He reiterated that the late-migrating fish at the tail of the run are especially valuable because of their high SAR rates.

With respect to adult passage, Wagner continued, the total summer chinook run at Bonneville is 127,000, compared to a 10-year average of 21,000. It wasn't the 140,000 summer chinook predicted pre-season, he said, but that's a phenomenal year. Boyce observed that 140,000 was the predicted number of fish entering the Columbia, not counted at Bonneville. He added that the 2002 fall chinook pre-season forecast is more than 600,000 adults. Coho numbers are way down this year, however, he said.

With respect to reservoir operations, Hlebechuk said these were covered during previous agenda items. The power system continues to hum along smoothly, Bettin reported. Moving on to water quality, Cassidy said that, with falling flows in the system, there are no dissolved gas problems to report; due to the minimum generation requirement at Bonneville, it is not currently possible to spill up to the gas cap at that project. He distributed a spreadsheet showing recent dissolved gas and temperature information throughout the system.

## ***10. Recommended Operations.***

Hlebechuk said Libby outflow will be reduced to 16 Kcfs as soon as a written request is received. [Editors comment: The Libby/Canadian storage swap agreed to on Thursday, August 8, resulted in Libby outflow being reduced from 21 to 18 kcfs at 1515 hours MDT August 8. This outflow will be adjusted as needed to draft Libby to about 2442.2' by the end of August, resulting in a 70 ksfd swap.](#)

## ***11. Other.***

***A. Lower Monumental 500 kV Line Work.*** Bettin said some work needs to be done on the Lower Monumental 500 kV line; it will take Lower Monumental down to a single 5 Kcfs unit for 12 hours (6 a.m. to 6 p.m.) on August 25, 26 and 27. The excess water will be ponded and released through the generating units during nighttime hours. In response to a question from Wagner, Bettin reported that the Lower Monumental stilling basin repairs are proceeding apace.

***B. Little Goose Doble Testing.*** Turner said this testing is scheduled to occur August 19-22; this will require a full powerhouse outage from 5:30 a.m. to 2:30 p.m. all four days. The project will operate one 5 Kcfs unit on speed-no-load and will then spill to maintain the 11 Kcfs minimum flow in the Lower Snake. We should probably discuss when to end the MOP operation at the August 15 meeting, Bettin said; if we could fill above MOP, that would give us some additional operational flexibility which would allow for a smoother operation during the doble test. Chris Ross observed that the timing of the test is good, as it will occur during the lull between the juvenile and adult migrations.

***C. One-Year and Five-Year Implementation Plans.*** Scott Boyd reported that the one-year and five-year implementation plans are now available via the [www.salmonrecovery.gov](http://www.salmonrecovery.gov) website. The comment period on those documents is relatively short, he said, so I would suggest that anyone who intends to review them do so soon.

#### ***12. Next TMT Meeting Date.***

A special TMT meeting to discuss August and September operating plans was set for 9 a.m. Thursday, August 15. The next regularly-scheduled face-to-face meeting of the Technical Management Team was set for Wednesday, August 21. Meeting summary prepared by Jeff Kuechle, BPA contractor.

### **TMT PARTICIPANT LIST AUGUST 7, 2002**

<b>Name</b>	<b>Affiliation</b>
Donna Silverberg	Facilitation Team
Jim Litchfield	Consultant, Montana
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Scott Bettin	BPA
Cathy Hlebechuk	COE
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Paul Wagner	NMFS
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